

We claim:

- 5 1. A process for dewatering hydrocyanic acid by distillation, which comprises distilling crude hydrocyanic acid containing from 50 to 99.9% by weight of HCN, from 0.1 to 40% by weight of water, from 0 to 15% by weight of carbon oxides and optionally from 0.01 to 1% by weight of an involatile stabilizer, at a pressure of from 1 bar to 2.5 bar, a bottom temperature of from 100°C to 130°C and a top temperature of from 25°C to 54°C, in the
10 absence of a volatile stabilizer, in a distillation column to obtain a top draw stream containing purified, anhydrous hydrocyanic acid and carbon oxides and a bottom draw stream comprising water and, where appropriate, the involatile stabilizer.
- 15 2. A process according to claim 1, wherein the crude hydrocyanic acid comprises, as an involatile stabilizer, phosphoric acid or sulfuric acid.
3. A process according to claim 1, wherein the crude hydrocyanic acid contains no stabilizer.
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4. A process according to any of claims 1 to 3, wherein the obtained purified, anhydrous hydrocyanic acid has a water content of < 100 ppm.
5. A process according to any of claims 1 to 4, wherein the distillation column
25 is a bubble-cap tray column or column having structured packing.
6. A process according to claim 1 to 5, wherein the crude hydrocyanic acid is obtained by thermally cleaving formamide.
- 30 7. A process according to any of claims 1 to 6, wherein the carbon oxides present in the purified, anhydrous hydrocyanic acid are stripped out using an inert gas in a downstream purification column.
8. A process according to any of claims 1 to 7, wherein the anhydrous
35 hydrocyanic acid is stored at from 5 to 25°C in the absence of a stabilizer over a period of from 2 to 10 days.

9. A process for hydrocyanating olefins or dienes by
- 5 a) in a first step, dewatering crude hydrocyanic acid by a process according to any of claims 1 to 8 and optionally storing it in the absence of a stabilizer,
- b) reacting the anhydrous hydrocyanic acid in the absence of a stabilizer with the olefin or diene in the presence of a hydrocyanation catalyst.